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SEEDING SANDY LAND.

HOMER, June 25th, 1888.

I have read with much interest the articles written by you in the MICHIGAN FARMER, and, being in need of advice I take the liberty of writing to you. The facts of the case are these: I have an acre and a half of wheat soil quite sandy has been cropped so much that it is failing to catch this spring. I have no manure to put on it. What course would you take to get the lot seeded to clover? Did your plan of seeding in the fall prove a success?

C. D. S.

The importance of this question, in which so many farmers are interested, demands a wider hearing than a personal reply could furnish.

Replies to the last question first, the seeding was a success so far as my part of the scheme extended, but I could not control the temperature while the ground was bare, and so most of the clover was pulled out by the frost, a very unusual thing on sandy soil. The volunteer wheat and timothy made quite a show on the ground and I have cut the whole for hay. What clover came through was so feeble that it made but little show but is now improving, and the field will make a fair meadow another year. There would have been no failures in wheat this year except for the cutworms. They have destroyed thousands of acres of new seedling. I sowed a 20-acre wheat field to clover in March. It came fine, but a part was injured by late freezing weather after it had sprouted above ground, yet enough was left to make a good stand; but cutworms began on it as soon as they appeared, and they have wiped it out completely. There are two plans now which I consider safest to follow and the individual can adopt which seems best suited to his needs. The first is in every respect like the plan I adopted and reported last year, viz.: to cultivate thoroughly, according to the amount of sorrel and June grass. I went over mine last year four times, crossing each time, and subdivided the ground completely. I should watch the weather closely and try and sow either just before a heavy rain or soon after, as soon following August 10 as I could catch the proper conditions, and certainly before the 25th. I should sow a peck of timothy to a bushel of clover. Level the ground with a harrow and sow broadcast and plank down to level the surface.

The other plan is to plow the ground—and this I should recommend if it is very foul—it is well and sow a bushel of winter rye to the acre and put the seed in the drill mark with the grain, if possible. The shoe drill made at Dowagiac will do this. The rye roots will hold the clover down where danger of heaving in winter is feared. If the clover gets a good growth I would mow rye and all for hay when well in head, and leave the clover to occupy the ground early. This will insure against August drought killing it. The rye hay makes good feed for all kinds of stock and is more profitable than to harvest the crop. This spoils the straw for fodder, and there is a large amount of stuff to handle with little value. I have had clover head out two-thirds the height of the rye. This makes excellent feed. The rye also furnishes a large amount of fall and spring grazing. The stock will not hurt the young clover by trampling on it; it is, on the contrary, rather favorable to a firm rooting of the plant. Sheep might bite too close, but cattle and horses will not diminish the stand. We might as well abandon farming as to abandon clover. I shall take the chances, meanwhile using my best judgment to secure a catch.

A. C. G.

NOTES FROM THE FARM.

It may be remembered by constant readers of the FARMER, that last summer I stated that I had left a strip two or three rods wide, around a 20 acre field that was intended for wheat, which I did not plow until the rains came the last of August. The field was in corn the year before. I began to plow in the center of the field, in midsummer, while the ground was very dry, and left this strip as a test of the utility of summer fallowing. The field now is beginning to ripen its crop of wheat, and the field all around shows this strip very plainly marked by taller wheat, earlier ripening, and larger heads. I have called the attention of others to the condition of the wheat from early spring until now, and all agree upon the better appearance of this part of the field. On two sides of the field the improved appearance will be found in the mature crop from the salting, although the salted oats will doubtless ripen first. The experiment will be watched, and made to pan out truth, whichever way it turns, for it is under the direction of one of our most thorough farmers, and he is bound to know whether he is to get pay for his expenditure. The field will be measured in the two parts, cut separately, and kept so until after the threshing, so that the yield can be compared in both weight and measure. Readers of the FARMER may expect to hear farther from this interesting test, whether my theory of the outcome is correct or not. Salt is here fairly on trial, and if the result is such as to command it to farmers as a safe and sure fertilizer, we all want to know it, and profit by it.

A. C. G.

"A six-year-old ram, belonging to T. F. and C. D. McConnell, of Ripon, Wis., sheared thirty-eight pounds of wool, the heaviest fleece of which there is any record in America or Europe, and over five pounds heavier than any before given."—*Phila. Press.*

This is the same old lie which was started in April last, and which many live stock and agricultural journals have given a place in their columns without thinking. For the past five years in this State rams have been sheared in public whose fleeces were over 40 lbs. We saw one sheared in New York at the State shearing, which gave a fleece of over 40 lbs., and several have been reported in Vermont. The heaviest fleece sheared in Michigan was taken from Diamond, owned by A. T. Short, of Coldwater, and weighed 44 lbs. 12 oz. It was sheared at the State shearing held at Lansing, and under the eyes of a committee and about a hundred spectators, some of whom were from other States. Now, gentlemen, give that 38 lbs. fleece a rest. It shows you are not posted when you give place to such paragraphs.

I can only speak for myself on my farm, but I am satisfied that it is not best for me to plow for wheat when it is dry, nor to let fields lie fallow to burn under the hot sun. I prefer to have something growing to cover the earth from the heat until the ground is needed for the next crop. There is the difficulty of subduing a field of June grass, but there can be such energetic treatment of a field, immediately after plowing, as shall destroy any foul grass, until the wheat can gain the supremacy, when it can hold its own against all incipient growth below. Simply scratching the inverted sod with an old-fashioned harrow will not do. Some sort of wheel cultivator, either spring tooth or other, that will effectually cut up half the

"PRACTICE WITH THEORY AND SCIENCE!"

By A. D. Power, of Northville.

(A paper read at the Annual Meeting of the Michigan Dairymen's Association.)

A somewhat celebrated writer on dairy topics once said that the first requisite to success in dairying is to have all your conditions right. While all realize the truth of this statement, everybody should know it to be a practical impossibility. Civilization and science have not yet reached that high state of perfection where all the conditions affecting any one industry are right. Time will have marched off arm in arm with eternity and this earth become an uninhabitable waste ere this much-to-be-desired condition of things has been reached. Be it as it may, we all believe in progress. But it would seem that the average dairy farmer must be faithless in such belief, else fails to live up to his convictions. Thriftless and wasteful dairying, unprofitable milking stock and many other disadvantages have yet to be overcome before dairying takes its place at the head of all other agricultural interests, it certainly is destined to do in all sections of our country adapted to a successful conduct of the business.

SALT ON GROWING CROPS.

The epidemic of salt sowing is about as regular in its appearance as measles or whooping cough. The patient recovers in either instance without serious disarrangement of the natural functions. The effects on the individual are also somewhat allied—one attack suffices for a life time. But in the ease of salt sowing this does not always prove true. The contagion appeared here again last spring, and it was taken the natural way, by a few farmers, for the second time. I was called last week to look at a field of oats where salt had been sown. Nothing was explained to influence my opinion. I was told around to the dividing line where salt sowing ended, and was asked if I could see any difference. That question was unnecessary. The difference was plainly marked as between a field of wheat and rye. On the one side the oats were all in head, and showed a grayish white all over that part, while the other portion or end of the field scarcely showed a head. A stone on the fence, and this appearance, plainly visible from any part of the field, showed where the sowing of 300 pounds of salt to the acre ended. I could not see that the oats were thicker on one part than on the other. I was left to surmise on which part the salt was sown. I said, as doubtless will those farmers who have followed the narrative, that the latest oat sowing was the salt. But the opposite fact was true. Here were oats thrown out several days in advance of the remaining part of the field, manifestly and undoubtedly caused by salt on the land. If we stop here and seek for no solution salt scores a point, and perhaps it does in this instance and under like circumstances, but now for my explanation of the cause, which is question by some: About the middle of the month rather earlier than the middle—we had, in this locality, a hot wind, that curled up the leaves on the apple trees, and many of them fell off. It also affected every growing plant, in some degree, less observable on some than on the leaves of fruit trees. It was the protection afforded by the salt, which, in my opinion, allowed the salted oats to continue their growth, while the growth of the remainder of the field was checked by the blasting wind. The ground where the salt lay was cooler, and perhaps more moist so that it could withstand the unusual condition of temperature, and kept the oats pending the success of the patron.

HOW TO IMPROVE QUALITY (THUS INSURING LARGER RETURNS TO THE DAIRYMAN) HAS BEEN A TROUBLESOME QUESTION WITH ME. I HAVE WORKED OVER WHAT MIGHT BE THE RESULT OF SOME CHANGE MADE IN HANDLING THE MILK IN THE VAT. I HAVE ADVISED, WATCHED AND RECORDED RESULTS. I HAVE BEEN TWICE IN CANADA FOR NO OTHER PURPOSE THAN THAT OF LEARNING SOMETHING THAT I HAD FAILED TO LEARN ON THIS SIDE. WE ARE FORCED TO ACKNOWLEDGE THAT THE CHEESE MAKERS OF CANADA ARE FAR IN ADVANCE, IN THE MANUFACTURE OF FINE GOODS, OF THE AVERAGE MAKERS OF MICHIGAN. WHY IS THIS? IN NATURAL ADVANTAGES—WATER, SOIL, CLIMATE. MICHIGAN IS FULLY UP, AND PROBABLY BETTER ADAPTED, TO THE PRODUCTION OF SUPERIOR DAIRY PRODUCTS THAN IS CANADA. THE FAULT, THEN, IT WOULD APPEAR, MUST REST WITH OUR PRODUCERS. THE BEST NEW YORK CHEESE IS SOLD IN OUR MARKETS AT ONE-HALF TO ONE CENT PER POUND ABOVE THE PRICE OBTAINED FOR THE AVERAGE HOME MADE. NAME MAY HAVE, IN SOME LOCALITIES, SOMETHING TO DO WITH THE DIFFERENCE IN PRICE. BUT THE FACT THAT SOME BRANDS OF HOME MADE ALWAYS SELLS UP TO, AND FREQUENTLY HIGHER THAN, THE BEST NEW YORK CHEESE IS PROOF THAT NAME REALLY FIGURES BUT LITTLE IN MAKING PRICE. SUCH A STATE OF THINGS SHOULD CONCERN OUR DAIRYMEN. ONE OF THE LESSONS LEARNED IN MY SEVENTEEN YEARS' EXPERIENCE IN THE CHEESE MANUFACTURING BUSINESS IS THAT UPON THE FACTORY AND ITS MANAGEMENT, FROM THE RECEIVING OF THE MILK TO THE MARKETING OF THE GOODS, LARGELY DEPENDS THE SUCCESS OF THE PATRON.

ONE OF THE TROUBLESOME QUESTIONS

CONFRONTING US TO-DAY IS HOW TO MAKE GOOD THE CONSTANT DEPRECIATION OF OUR HERDS.

IN SUCH A WAY AS TO FORM A BASE FOR GRADUALLY AND PERMANENTLY INCREASING THEIR MILKING CAPACITY.

AT PRESENT, LITTLE MORE THAN A START IN THE RIGHT DIRECTION CAN REASONABLY BE EXPECTED.

THAT THIS IS TRUE CAN, PERHAPS, BE SHOWN BY THE FOLLOWING FIGURES:

THE GOVERNMENT LIVE STOCK STATISTICS OF 1880 GAVE MICHIGAN 416,900 HEAD OF COWS.

ADD TO THIS FIFTEEN PER CENT. FOR INCREASE FROM THEN TILL NOW, AND WE HAVE 479,435 HEAD.

FIXING THE MILKING PERIOD OF A COW AT NINE

YEARS CALLS FOR A REPLACEMENT OF ELEVEN AND ONE-NINTH PER CENT. ANNUALLY.

TO THIS ADD FOR DEPRECIATION, FROM VARIOUS OTHER CAUSES,

ENOUGH TO RAISE THE YEARLY SHRINKAGE TO TWELVE PER CENT., AND WE HAVE AN ANNUAL DEFICIT OF 57,532 HEAD.

THIS AMOUNTS TO AN EXTENSIVE PURCHASE AND MEANS, SIMPLY, THAT IF THE DAIRYMAN MAKES HIS NUMBER GOOD, IT

IS SOLVED. THIS STUPID PRACTICE, WHICH DAIRYMEN HAVE ALMOST UNIVERSALLY ADOPTED, OF SELLING THEIR CALVES FOR THE BLOCK, IS AKN TO THE SHORT-SIGHTED AVARICE OF THE FARMER IN OUR FEEDING AND OUR CROPPING, FOR A LONG SERIES OF YEARS, AND RETURNING LITTLE BACK TO THE LAND TAUS ROBBED; THE ANXIETY BEING TO GET ALL THERE IS IN THIS GENERATION, WITH LITTLE THOUGHT OF THOSE COMING AFTER. HERDS, LIKE FIELDS, THAT HAVE BEEN THOROUGHLY ROBBED FOR YEARS, YIELDING A FAIR DIVIDEND TO THE OWNER IN THE PAST, GIVING NO EQUIVALENT IN RETURN, MUST SUCUMB TO FATE.

A HARDLY LESS IMPORTANT REQUISITE TO SUCCESS THAN THESE ALREADY MENTIONED IS ADAPTED TO GRAZING, FERTILITY OF THE SOIL, WATER, ETC., ETC.

WHILE DAIRYING CAN BE CONDUCTED ON IMPOVERISHED SOIL AS GOOD OR BETTER RESULTS (ESPECIALLY WHERE RESTORATION OF THE LAND IS CONSIDERED) THAN, PERHAPS, ANY OTHER BRANCH OF FARMING, IT IS QUALLY TRUE THAT FEW, IF ANY, OTHER FARM INDUSTRIES PAY AS WELL FOR HAVING ALL THE CONDITIONS RIGHT, SO FAR AS PRACTICABLE, AS DOES DAIRYING.

THE GREAT NEED OF OUR DAIRYMAN TO-DAY IS A DAIRY SPIRIT.

LET DAIRYMEN BECOME ENTHUSIASTIC WITH THOUGHTS OF PROGRESS AND PROSPERITY, AND LESS TIME THAN WAS REQUIRED TO RAISE THE FLOCK OF THIRTY YEARS AGO

FROM FOUR POUNDS OF WOOL PER HEAD TO EIGHT

POUNDS PER HEAD, WILL BE REQUIRED TO RAISE THE COW FROM AN AVERAGE OF FIFTEEN POUNDS OF MILK PER DAY TO 270 CONSECUTIVE DAYS TO THIRTY POUNDS OF MILK PER DAY FOR THE SAME NUMBER OF DAYS.

THIS AND MORE CAN, AND WILL BE DONE.

WHAT THE DAIRYMAN MUST DO, TO BECOME MASTER OF THE SITUATION, IS THE GREAT THING FOR HIM TO KNOW AND PRACTICE.

♦ ♦ ♦

A DESPATCH FROM PARIS SAYS THAT THE LOCUST PLAGUE IN ALGERIA IS BECOMING WORSE.

SIXTY THOUSAND LABORERS AND 2,000 SOLDIERS ARE POWERLESS.

THE WHOLE COUNTRY IS DEVASTATED AND IT IS FEARED THAT FAMINE AND PESTILENCE WILL RESULT, AS THE CROPS ARE JUST

MATURENING.

FRANCE GETS CONSIDERABLE WHEAT

AND OATS FROM ALGERIA.

♦ ♦ ♦

THE POTATO, AS GROWN FROM THE TUBER,

THRIVES FOR ABOUT 25 YEARS, WHEN IT BEGINS TO

DETERIORATE, AND RECOURE MUST BE HAD TO

SEEDLINGS, WHICH IN TIME WILL PRODUCE GOOD

CROPS AND LAST A GIVEN TIME.

♦ ♦ ♦

WISCONSIN FARMERS COMPLAIN THAT THE DANDELION IS BECOMING A TROUBLING WEED

IN THEIR FIELDS.

WHEN IT WILL JUST TRY TO GROW

IT AS A MARKET CROP FOR GREENS, THEY'LL

FIND OUT SOON ENOUGH THAT THE CROP IS NOT SO CERTAIN.

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The Horse.

Dates of Trotting Meetings in Michigan for 1888.

Grand Rapids.....	July 10 to 13
Bay City.....	July 11 to 14
Detroit.....	July 24 to 27
Centerville.....	Sept. 4 to 8
Lansing.....	Sept. 18 to 21
	Sept. 24 to 28

ANOTHER "BOOM" IN PREPARATION.

There is another "boom" being manufactured by parties who make a business of importing horses. This time it is in the Belgian breed. Of course it will be shown that this breed is just what is needed in the United States to finish up its horse stock; that Belgian horses are the oldest breed in the world, and have been kept free from admixture with other families of the horse since the time of the Crusades. They will be brought over in good numbers and offered at very high prices to the breeders of this country. So far as the Belgian horse is concerned it is a fair specimen of the draft, not extra by any means, and to our mind inferior both breeding and individual merit to the Clyde, the Percheron, or the English Shire. In fact we know of no good reason for the introduction of the Belgian horse more than that the importers will make a good thing out of the business and the Belgian breeders will share in the profits. At present the United States are doing a great deal to support the farmers and stock-breeders of Great Britain and France by affording a market for their improved breeds of live stock, and often with very poor results to our own stock which they are expected to improve. It strikes us that stock men in the United States should go slow in investing in new and untried breeds of live stock, which when tested by crossing upon the stock of the country may not only prove worthless but damaging. Let importers content themselves with old and well-tried favorites, and if there are enough of those breeds now here let the farmers and breeders go ahead with their business, depending upon their resources and judgment, and leave costly investments in new ones severely alone.

THE THOROUGHBRED HORSE.

Senator Stanford, of California, who seems to have reduced the breeding of trotting horses to an exact science, is evidently a great admirer of the thoroughbred horse. In a recent interview he is reported as saying:

"I became interested in thoroughbred horses through ill health. My doctor had ordered a vacation for me, and had told me that I must go away on a tour. I could not leave at the time, and he advised me to drive as much as possible. I bought a little horse that turned out to be remarkably fast, and it was in using it that I became interested in the study of the horse and its actions. I had those instantaneous photographs taken of the horse in motion, and I began to buy fast horses and breed them. It was very expensive at first, but it is more profitable, and I think that it is useful as well. We are raising a much finer class of horses in the United States now than ever before, and I believe that by proper breeding we can double the working powers and the staying powers of our work horses. I believe the thoroughbred makes the best work horse as well as the best running or trotting horse."

He also said that a trotter needed thoroughbred blood if he was expected to trot three consecutive heats under 20. This faith in the value of the thoroughbred is well grounded, and we believe that an infusion of this blood in all horses used for driving, carriage and saddle purposes will do more to improve them than the use of the imported horses so much fancied at present. The English have, for years, stood at the head of the world in breeding horses, and they use the thoroughbred in producing coach, driving, cavalry and saddle horses, as well as hunters. The idea that they are vicious or rattle-headed is the result of seeing them while in the training stable or on the turf when mere colts. When well handled and broken they show more nerve, courage and head than any other class of horses. Count Lendorff, superintendent of the great breeding stations of the German government, is a great admirer of the thoroughbred horse, and relies on it to give that high courage, stamina and gameness so necessary in horses used in the military service. The truth is the thoroughbred is not estimated at its true value in the United States.

Care of Farm Horses.

The general appearance of the farm horses throughout the country furnishes convincing proof that the great fundamental principle, that feed and work are to one another in inverse ratio, is widely ignored. Thus in severe weather, when to work abroad is most exhausting to the animal system, no change is made in the daily ration, neither are precautionary measures taken when forced illness occurs. In the term "severe weather" the extremes of heat and cold, as well as that most trying phase, drenching rains, are included. Few horse owners seem to be aware how dangerous to the lives of horses are heavy rains; a thunder shower encountered in the course of heavy work will cause chest founder, rheumatism, and lung and bronchial trouble. With these serious dangers at hand, horse owners would need to be cautious and well provided against the possible results. The winter of this year, from January 1, 1888, to May, 1888, was a period of sore trial to animal life; the weak and the strong alike went down before its unwonted fury. The powerful truck horse, well cared for in city stables, the family horse of the village, the rag-picker's starving cripple, the sleek and pampered carriage horse, the high-priced trotter, and even the costly and scientifically cared for thoroughbred, all suffered more or less from the visitation of a severe and protracted winter. The sole cause of this widespread suffering and large attendant loss, was not the dreadful weather experienced; it was in many instances due to want of proper care. The dweller in city stables is exposed to foul air, arising from overcrowding until the atmosphere is pestilential, and his vital forces are depressed by breathing over-heated air, laden with disease from improper surroundings; the opposite conditions torment the farm drudge,

whose sad life is hastened to its end by damp stables, noisome and chill.

The care and feed of a horse whose work is slow, should differ entirely from the care and feed of a horse required to put forth his strength in rapid action. This difference does not consist in neglect of the one nor in over-solicitude for the other. Quite the contrary, as both animals require treatment based on sound judgment. The slow-worked horse can with perfect safety be given a more bulky ration than it is possible to expect a fast-working animal to thrive upon. It must be borne in mind by horse owners that it is not the quantity nor even the quality of a horse's ration which alone keeps him in health, rather is it the quantity of proper food which is fully digested and then assimilated, which sustains animal life and insures its most vigorous tone. The losses by death have been very heavy this year, even in farm stables, where the horses were not called upon to put forth unusual exertion, but where a secret danger lurked in evils incident, unusually lengthened hours of idleness, and where no change ever was observed.

When a horse stands idle his daily ration must immediately be reduced in quantity and varied in substance. No grain should be fed, except sparingly, and in a fully cooked state. The allowance of hay should be diminished, and light mashes easy of digestion should replace the solid food held back. Absolutely no cold water can be allowed, as to swallow a sufficient quantity of cold water and take no exercise would chill the stomach, reduce the normal heat of the system, thus inducing indigestion, a frequent forerunner of colic. Water which stands at blood-heat is always safer than cold water in that it is more readily absorbed, in hot weather it thins and cools the blood, mixing rapidly with it, and in cold weather it does not chill the stomach. A comforting drink of oat-meal gruel, or of linseed gruel, one pint of meal or of linseed to a gallon of water, will be of greater value to the fatigued or idle horse, than would be a bushel of grain. Another source of danger to the farm horse is the practice of feeding roots in their raw state. Roots, such as carrots, potatoes, etc., given in very small quantity, when chopped fine and mixed with hay and bruised oats, act as mild laxatives, and with some horses give tone to the stomach; these roots mentioned should never, when fed raw, be washed, as when properly housed or potted there will adhere to them more or less of the soil in which they grew. These earthy particles are wholesome for our domestic animals, none of which need this condiment more than those constantly fed by hand. While on pasture and grazing, quite a goodly share of earth is taken up. Now we are careful to request horse owners and grooms to distinguish between earth and dust; the latter is most hurtful.

Thus dusty hay causes various affections of the lungs and respiratory organs. Grain in a dusty state also causes serious troubles, one of the most deadly forms being calculus, a disease to which millers' horses are subject. It is noteworthy how slow to shed their winter coats are farm horses. This delay in the action of the skin is generally ascribed to the coldness of stabling, as contrasted with the warmth of city stables. True, warmth is a recognized factor in early coating, but good, nourishing, easily digested and readily assimilated food, has far more to do with the matter. Last April the larger number of farm horses looked shaggy as bears were low in condition, having the outward symptoms of ill-health. This had nothing to do with the improvement of treatment, rather than exposure to the severe weather. When from any cause whatever a horse is kept idle in the stable, it is cruelty of the gravest description to tie the animal so that he cannot have easy and frequent change of position.—M. Morgan, in *American Agriculturist*.

Horse Gossip.

MISS RUSSELL, dam of Maud S. and Nutwood, has a bay filly by Electroner. She will be bred to him again.

THE pacer Argyle, which paced here last season, won the free-for-all at Milwaukee last week. He is a game little horse.

For the fourth time in the five years of its existence Chicago's American Derby has been won by a California colt, the winners being Modesty, Volante, Silver Cloud, C. H. Todd and Emperor of Norfolk.

A few days ago Philo Hall refused an offer of \$600 for a standard bred Ambassador colt, which was less than week old. Thursday night the colt died from the effects of colic.—Jackson Patriot. Moral, when you get such an offer as that let your colt go, and let the other fellow take the chances.

J. C. STERLING, of Monroe, Secretary of the State Agricultural Society, has issued a circular giving all needed information about speed classes at the coming State Fair, and this circular with entry blanks will be sent upon application. All Michigan breeding stables should be represented in the class for Michigan horses.

JUNIOR JOHN CAREY'S five-year-old, which made a record of 2:51½ at Kalamazoo recently, was presented with a fine new harness by L. C. Hurd, of Jackson, who announced he would give a set of harness to every Jackson County horse making a record of 2:21 during the Jackson meeting last week. He did not have to pay for a single set in consequence of his promise.

THE well-known pacer, W. D., owned by J. C. Maddox of Montpelier, Ind., died near Marion, that State, while being driven to the Wabash races, overcome by heat. W. D. was valued at \$2,000, was ten years old, and probably the fastest pacer in Indiana. He won at the Cambridge City races in 2:21 and had made his mile in 2:15. He was under protest at the time of death.

SO-SO, by George Wilkes, dam Little Ida by Edwin Forrest; grand dam Ida May by Red Jacket, a son of Comet, he by Sherman Morgan; g. g. dam Anna by Kinkead's St. Lawrence, brought \$8,500 at the sale of Commanders' Kittens' trotters. She was purchased by H. D. Stout, Dubuque, Iowa. The Almonte Witherpoon, Fanny 2:16, brought \$4,500; Gem, 2:13½, \$2,025, and Minnie R., \$1,225.

EMPEROR OF NORFOLK has won seven races and \$28,620; Terra Cotta has won the same number of races and about \$13,000, and The Bard has won six races and about \$18,000. But while these great horses were winning such

sums, hundreds of others were losing. It is no use expecting to win money on the course without you have the best horse, hence the high prices paid for those who are thought to be at the head of their class.

AT the sale of yearling thoroughbreds bred by J. B. Haggan, of California, at New York on the 26th ult. Lucien Appley paid the enormous sum of \$38,000 for King Thomas, full brother to Ban Fox and King Fox, and sired by King Ban, dam Maud Hampton. King Ban is dead, so this colt is the last of his race. The bidders for the colt were Mr. Gratz, the Dwyer Brothers, Senator Hearst and Mr. Appley. This is the highest price ever paid for a yearling colt.

The Breeders' Gazette, in its issue of June 27, publishes the following from a Canadian correspondent: "We are having trouble here in the draft-horse business with new associations, which register and give certificates for cross-bred animals. Two of these have been recently organized. The object is not concealed, viz.: to give certificates that will help to sell animals on your side. We were only animals as are eligible for registration and properly entered in regular standard books passed free at the frontier. It would soon stop this registration of mongrels." This is a matter we have before referred to, and we warn the readers of the *FARMER* against depending upon records in such publications. There was an association formed at Goderich, Ont., some three years ago, the proceedings of which we published, the members of which openly acknowledged that they only registered their mongrels as to sell them to Americans. The free importation of such animals should be stopped.

E. Aitken in *American Cultivator*.

quantity of turnips had to be then increased to "get up steam" in my cask.

At the time this was considered a sort of self-acting steaming apparatus. Now I look upon it as more of an accidental silo, for there was fermentation as well as succulence in the product. Of course the percentage of water was far less than is usual in corn ensilage. But we now know that the less the moisture per cent. in our material when packed, up to a certain point, the better the ensilage resulting. The facts recited occurred in Virginia, four or five years before Mr. Morris, of Maryland, made the first silo in America, copied from the French, and at least two years before the earliest mention in English which I have been able to find, of the system of silos and ensilage.

I had almost forgotten this experience, when, upon opening my first regular silo, almost ten years later, I was forcibly reminded of my sugar-cask steamer. Now it seems a fair question, which was my first silo?—H. E. Aitken in *American Cultivator*.

About Chinch Bugs.

If it be true, as Professor Forbes says, that the chinch bugs lay their eggs during May and early June, and that if the soil is very damp the majority of the eggs are deposited on the stalk of grain near its base, then heavy rains will not leave the ground favorable to their incubation. We hope the Professor is right, and that soon after the eggs hatch we will have more heavy rains; but we fear if each female lays 500 eggs she will be six weeks or two months about it, so that she will fifty per cent. of her eggs prove fertile and one-half of those mature there will be an abundant supply. The editor of the *Kansas Farmer* says: "Our special reports show that this detestable destroyer is present in large numbers in some parts of the State. They are flying and that means mating. All authorities, so far as we know, except one, agree in the belief that we are not to be seriously injured by the chinch bugs this year. But as long as the pest is present in any considerable numbers the farmers must make war upon them in a manner that will count. It will be expensive, for the treatment must be heroic, but it will be cheaper in the end. Wheat and oats will, as usual, first be attacked. When the bugs get well settled down to work they are not disturbed by any kind of usage. They have wings, but do not use them at that time. If it appears that the whole field is covered, cut down every stalk with a mower, let dry and burn; then plow and plant to some early variety of corn. It is a good deal to lose a field of wheat, but it is better to kill the bugs than to lose the wheat and have the bugs left to bring on another brood in the fall, and that to remain with us over winter for another raid next year. If it is necessary, burn out fields, wheat fields or grass fields to get rid of the bugs. Let the sacrifice be made. The time will be June and there is then plenty of time to raise a crop of corn or buckwheat. We do not expect serious trouble this year from chinch bugs, but we feel uneasy as long as they are in sight, and this suggestion is thrown out as the best we can offer just now."

Management of Pastures.

Farmers are apt to feel that little or no attention should be given to pasturage, and the same ones are grazed year after year, and from the scanty amount of grazing they afford, look for their animals to thrive and their cows to give an abundance of milk. It is not considered that there is a continual drain upon the most important constituents required by the animal, and that drain must be supplied, in order to secure satisfactory results, but the draining is continued from year to year at a loss of production to the owner. For instance, a cow yielding say 750 gallons of milk per annum gives in the milk the equivalent of about 83 pounds of dry bones, and if the milk and butter and cheese made from it is sold off the farm, that amount is lost to the soil. A calf is supposed to carry off 10 pounds, so for a cow in milk and a calf will in the course of a year remove such an amount of mineral matter as would be equivalent to something like 50 pounds of bone dust, and with a herd of twelve to fifteen cows, at least 500 pounds of bone dust should be spread as a top dressing upon the pasturage. If this was practiced by farmers and especially by dairymen, it may be supposed that they would be surprised at the result themselves. It should be borne in mind that you must feed the soil if you would have it feed you.—*Germantown Telegraph*.

Best Service from Posts and Boards.

Useful observations have been taken in tearing down and repairing post and board fence. Where posts are faced so as to have a flat surface, both posts and boards soon rot at the point of contact. If posts are sawed off at the top board, and the fence capped with another board, the tops of the posts and the boards resting on them decay rapidly. If the posts are sawed off even with the top boards, to make the fence look uniform, the tops of the posts decay first and the upper nails draw out and the boards soon get down. If posts are sawed off at all, it should be six inches above the upper board. For durability of both posts and boards at point of contact, posts should be either round or with a notched edge.

But with such posts, board cannot be matched at the ends. There is a better way to make post and board fence, which combines superior strength and durability. In this the ends of the boards of each alternate panel are nailed on the front of the end posts and the middle posts are set on front side and nailed on to the back side, and the other panels are the reverse of this. This obviates the necessity of a helper in nailing on the boards. The centre posts act as braces on either side. Such a fence is not so liable to get leaning in consequence of heavy winds. Made in this way, with round or sharp-edged posts, one will have the benefit of all the wear there is in the material.—*N. Y. Tribune*.

Potatoes Mixing in the Hill.

It must not be supposed that because some vegetables originate from what is technically called a "sport," that this method of creation is not as natural and permanent as that of reproduction by seed. We are so accustomed to this latter mode of origin in new varieties, that we are liable to imagine it to be Nature's only mode; but

the history of many things shows that good permanent varieties originate in this way sometimes. We have heard, for instance, of potatoes mixing in the hill. Some one plants pieces of white potatoes. He knows they were all white without any admixture of any sort, yet on digging he finds a tuber or set of tubers all red. Therefore he fancied that bees have brought the pollen of a red variety from some distance to the white flower, and in this way the pollen of the red became infused with the white, and that this infusion of the pollen affected the sap so as to infuse the whole plant, even down to the tubers, and this is called "mixing in the hill."

It is clear from one circumstance that mixing cannot occur in this way, for if our observations are correct, as we believe they are, bees do not exhibit much partiality for the potato blossom. The chance, therefore, that pollen is carried backwards and forwards and thus mixed by them is very small. But there is no occasion for inventing any such round-about explanation. The sweet potato "mixes" in just the same way as the other potato. That is to say, the plant will continually produce a red tuber from a white stock, or a white one from a red stock, and yet the sweet potato in this part of the world produces no flowers at all. It is believed that all the varieties of the sweet potato under culture were raised in this way; that is that a tuber was found varying from the rest, and this was saved or "selected," originated a new variety or race.

The fact is, there is an innate power in plants to change sometimes, without the intervention of seed or the seed organs, and there would therefore seem to be no reason why varieties may not sometimes originate this way, and be as permanent as if raised by what seems to us to be the more natural mode of seed.—*Germania Telegraph*.

Ensilage Endorsed.

Some time ago the Kansas State Board of Agriculture appointed a committee to investigate ensilage, and report the results of such investigation. The conclusions reached by the committee were as follows:

1st. That the time has arrived when the more progressive and economic methods of conducting the dairy and beef-producing interests should command the thoughtful consideration of Western farmers.

2nd. That the method of preserving green crops by means of silos, now common in the older States, is generally commended as practical and profitable by those having the largest experience in the business.

3rd. That ensilage, if intelligently prepared, is a good wholesome article of food for cattle, and when fed as it should be, in connection with dry feed, will materially increase the product and profit of the dairy; make the production of beef more remunerative; improve the condition of hogs, and enable the farmer and stock-grower to realize profits not promised by the methods now common in the west.

4th. That corn is the most profitable crop for ensilage, and for this purpose the seed should be drilled at from eight to ten inches, in rows three and one-half feet apart. Good cultivation is required, and the crop should be cut just before or about the time the ears begin to glaze.

5th. That corn planted, cultivated and cut as above indicated, will average not less than twenty tons of ensilage per acre; that in feeding value, three tons of corn ensilage will equal one ton of tame hay, or that one acre of corn when made into ensilage, will equal about seven of hay; that the feeding capacity of a given amount of land can be at least doubled by the method proposed, and that without adding materially, if at all, to the cost per head of the animals fed.

Farmers' why should you pay a man \$40 to \$60 for simply ordering a Thresher, Engine or Saw Mill for you when you can buy direct from The Aultman & Taylor Company, Mansfield, Ohio, and save all this?

Agricultural Items.

EXCELLENT potatoes are raised in Manitoba. The potato beetle never attacks them, the season being too short for its full development.

In England ensilage is fed to sheep with good results. Experiments at the State Agricultural College indicate that it is an excellent food for this class of stock.

A CORRESPONDENT of the N. Y. Tribune says rats and mice will eat harness greased with neat's oil, while they will not touch that on which cool oil is

Horticultural.**CULTURE OF SMALL FRUITS IN BERRIEN COUNTY.**

[A Paper Read at the Joint Meeting of the Michigan Horticultural Society and the West Michigan Fruit Growers' Society at Benton Harbor.]

The culture of small fruits in Berrien County bears a close and striking similarity to the development of the same industry, in many other localities of our country. When some of us were boys, about everybody depended upon the spontaneous productions of nature for their supply of these household luxuries. When the days grew long, and the night short, we would range the field and meadows over, in search of the few small scarlet strawberries, found here and there among the tall grass and weeds; later, the old tumble-down, moss-grown, worm fence rows, were followed for miles in search of the small seedy black raspberry, the seeds for which the birds had doubtless carried there years before, and planted in those by-places for their own gratification and subsequent supply; and later still, the burnt districts among the timber belts and many old worn-out and abandoned fields, furnished us a rich harvest of good ripe blackberries and dewberries. In addition to these, the wild red raspberry, then as now, furnished a good supply, in many sections of the country; while the mountains, the hills and the marshes yielded, as they still do, our entire supply of that fine little fruit known as the huckleberry. It is a matter of some importance for some enterprising fruit-grower to tame this bush, and make it yield a larger, better, and more abundant supply of fruit than it does in a state of nature, and also nearer home. The time required in gathering most of these wild fruits, is much greater than that necessary for cultivating them around our respective homesteads. And when we take into consideration the superiority in quality, size and yield of those cultivated, over the wild types, except perhaps the huckleberry, we need not wonder that the wild types are being neglected and discarded. In the case of the cranberry, the same remarks hold true. The people of any neighborhood are something like a flock of sheep, when the leader goes over the fence, the whole flock follow except some poor cripples who dare not venture.

I hope, Mr. Chairman, the good people here, will not expect me at this time, and under these peculiar circumstances, to write out a history of "Small fruit culture in Berrien County" or anywhere else. Our programme was only prepared a short time ago. And this being the season when our hosts of insect enemies are working day and night, nothing short of eternal vigilance, and long hours of labor every day, will enable us to save our crops. Again, what do these, our friends from a distance, who will remain with us for a day or two, care to know who shipped or grew the first small fruit, in this county—whether it was Jones, Brown or Smith? It is equally immaterial to them. I might take up your time in giving the names of some of our pioneer fruit-growers, in this section of the State, some of whom have laid down the shovel and the hoe, and long ere this gone to their final resting place. An outline of their work, and their success, has already been given to the public, through the efforts, and so far as I know, the gratuitous labors of the painstaking and life-long horticultural student, Pres. T. L. Lyon, in the last report of the State Society, and who is with us today. Owing to the peculiar geographical location of Berrien County we have perhaps made greater progress in this line of industry than many other sections of this State. In the early rise and progress of fruit culture, especially the small and tender varieties, it was necessary to have speedy and convenient transportation to market. Our waterways were then the only means of reaching markets any considerable distance from the grower. The harbors and shipping points of the lake supplied the only available outlets; and the fruit centers nestled around those localities. Small fruits in those early times sold high; the demand was greater than the supply; and the value of real estate about those fruit centers rose correspondingly high. Many launched their boats, as they supposed, on the tide of great prosperity only to sink in the vortex of financial bankruptcy.

I have known strawberries, of very poor quality, sell for \$12 per bushel, blackberries by the case for 50 cts per quart, and whole crops of black raspberries for 88 per bushel, net. But this was in war times when we had a high tariff and everybody had stamps. Since then, many ups and downs have occurred in this business, like all others.

Railroads, have stretched their long iron arms out into almost every part of the land, gathering up and distributing the products of one zone to the another, as though everybody was next door neighbor to everybody else. This equalizes production, and brings not only the necessities, but also the luxuries from all lands to the door of every well to do household. Small fruits are no longer a luxury, unless it is with some of our rural population who cannot find the time to give them care and culture. About everywhere they have become a household necessity; and not only in their season, but throughout the year, are found upon the sideboards of our wage laboring people as well as the rich; even the poor are not deprived of their use.

The culture of small fruits is no longer a bonanza. Like all articles of commerce, their value is regulated by quality, supply and demand. The question is no longer how can we grow them, so much as where can we find a market for we do grow. This occurs at least, when there is a general full crop in the various fruit-growing sections. Some years the margin of profits was so low, that we could better afford to abandon our crops, than gather and ship them. In the early time of this industry here our transportation was higher than now, but we were not blessed with the give-away package. We made our own packages, and had them returned, thus saving a very large expense to the shipper. But the commission men, who were taking their 10 per cent toll, besides the stealings incident to the business, complained of their great hardships, and by various means, the entire system of shipping was changed. I bought my first quart-box material, from Mr. Willcox, and made the packages at home. This was the

first attempt at quart box manufacture in this section, as far as I know. This was some 16 or 18 years ago. The material was cut by hand, with the help, I think, of one man. The amount of timber, consumed by that establishment, was comparatively limited. Now, the country round about is being stripped of its little remaining saw and box timber, to supply the numerous establishments engaged in making these give-away fruit packages. Sooner or later, we will have no timber protection for our tender fruits, and the business will eat itself out, like the Kilkenny cats. Our manufacturers have struck a new key; they are now reaching south, where timber is plenty and cheap, cutting it, and shipping it north, in the flat, to be made up ready for use. When fruit is plenty and low, and these expenses all coming out of the business, as they necessarily must, the margin of profit to the grower runs low. To find a ready sale at good figures, our goods must have qualities to recommend itself to the buyer.

Only those who will grow good fruit, pack and ship with care, guarantee the quality of their goods, and use a good business management generally, can effect satisfactory results.

From the most meagre beginning, in less than twenty years the culture of small fruits in this locality assumed a most important commercial attitude, the shipments reaching as high as 14,000 half bushel cases in a single day.

Among the pioneer fruit-growers in this part of the country, allow me to mention the name of David Brown, who, I am told, shipped the first strawberries from this harbor to Chicago, in 1861, and a year or two later he shipped the first blackberries (Lawton's) to the same market; and he is still engaged in the same business. Among others may be named Samuel Jackson and A. C. Fish, who have long since crossed the dark river.

In pursuing commercial fruit-growing, the question ever occurs: What shall we grow? This question is far more difficult for the veteran than the beginner to answer. Our soil does not respond to our demands as it did 20 or 25 years ago, when we had a virgin soil and plenty of timber for winter and summer protection. Varieties too soon to run out and to be replaced by others; more vigorous, more hardy and better adapted to the wants of the day. Many varieties, that years ago proved entirely satisfactory and were profitable to grow, have since been discarded, some for one reason, some for another. None has stood the test longer than the old Wilson strawberry; and there are yet those who consider it, for all purposes, the best berry to grow.

But other varieties are fast taking its place, and unless the difficulties (liability to leaf-rust, etc.) are overcome, it will sooner or later be entirely discarded as a commercial berry.

For home use it will stay a good while.

The Crescent is fast coming into general cultivation; being a good berry and exceedingly prolific will make it a favorite for years to come.

There are many new varieties being introduced every year, with the most seductive names, the Sucker State for instance, Jumbos, Big Bob, and others with names perhaps felicitous. Perhaps one in a score or so of these new comers may prove a valuable acquisition.

Among raspberries the cause sale holds true. The old Doolittle and Clark have gone; the Turner is going, or will go as soon as a substitute for it is found worthy in all respect to take the place of the good old Turner. Perhaps the Marlboro may, but so far it has proved a slow grower. The Cobbert is to-day, in this county, the leading red raspberry, and well it deserves the reputation it has.

Among black caps, the Gregg, for late, has no peer. The Tyler, for early, gives equally good satisfaction.

Among blackberries we are at sea. Our best varieties are somewhat tender, and must have winter protection to secure a crop one year with another. This department of horticulture is being eliminated to several ironclads, such as the Snyder, the Western Triumph and Taylor's Prolific, that need no winter protection in favorable localities.

The Lawton, Kittatinny, Wilson and Early Harvest, especially the two latter, must be well protected in the winter to insure a crop.

When thus protected they yield bountiful crops, and for home use I consider the Early Harvest the best of all blackberries. These are the leading varieties of these fruits, now in general cultivation in this county. Many new varieties are being tested, and sooner or later we may expect good results from some of these trials.

Rotting of Cherries and Plums.

It is generally well-known that a vast quantity of these two naturally perishable crops are destroyed by rot before they become ripe and are gathered, thus detracting heavily from the profits of their cultivation. Yet probably there are but few growers, who lose a great quantity annually, who thoroughly understand how and why this takes place, and fewer still would take the trouble to ascertain the particulars of it. To be brief, it is caused by a fungus botanically known as *Oidium fructigenum*, together with some interesting remarks by Professor Arthur, who writes: "When the fungus produces spores, which does not always take place at once, being largely controlled by the amount of moisture in the air, the surface of the fruit is covered with tufts, more or less distinct and about one-sixteenth inch high, of dirty white or gray polyvelvety fruiting threads. The tufts are somewhat compact, but readily fall into dust when rubbed. On apples and similar fruit they are at first distinct and pustular, but soon coalesce and become continuous; on plums and cherries the tufts are generally larger and less regular. The fruiting threads consist of short sections, each a little more swollen as they approach the ends of the threads where the sections are elliptical. The sections when ripe are separated and form the spores. When well grown in moist air they are abundantly dichotomous. The branches grow at the extremities, giving rise to new spores until the full length and maturity is attained, then the end spores successively drop away. Although this is a common fungus and known almost

from the days of Linnaeus, it does not seem to have been very carefully studied; generally authors are considerably at variance with each other in their accounts of its habits.

It is said by different writers to occur on the green, ripe or fallen fruit. Observations here show it to occur at all stages of the fruit's growth and decay. When the fruit is attacked before it is ripe, it usually remains hanging to the tree through the winter, even till fruit is ripe again, and spores of the fungus are to be found on it during the whole time. Recently a few spores from the dried remnant of a cherry, which had hung on the tree since the last fruiting time, were sown in water on a glass slide. They germinated within two hours by pushing out a vegetative thread from one end. This experiment was a number of times repeated, and the spores always grew with readiness. When the cherries ripen, the dried, mummified ones communicate the disease to those in contact with them and these to others, until the whole cluster is decayed. No remedy, better than turning swing into the orchard to devour the rotten fruit, is recommended to the buyer.

Cucumber and Squash Bugs.

There are not many kinds, but they are destructive and the little striped bug is difficult to manage. I follow the general custom of laying shingles on the ground among the vines, and early in the morning when the bugs are under the shingles, where they have taken shelter for the night, I clap the different shingles together, the bugs between, crushing the insects. The large squash bug I don't know what to do with. Hand picking is a disagreeable job and busy farmers have not much time for it. But the worst enemy of the vines is the little white maggot. After one gets into a vine the vine is lost, and the farmer knows nothing about it till the vine withers and dies. I read once of a man who put a handful of salt in the centre of a hill and had no trouble with the maggot. I tried it without avail. I am going to try tobacco this year. One man had success in growing squashes who used it, sprinkling tobacco around each plant. Other speakers followed and testified to the same troubles. The parent of the little white maggot is the striped cucumber bug. Prevent the laying of the eggs and you will have no maggots. I never succeeded in raising squashes until I put chickens in among the hills. I set a coop containing the hen in the patch and let the chicks run about and they destroy every bug that comes near. The value of tobacco consists in that being in a pulverized form it can be applied around the young plants. The female will not lay her eggs where the obnoxious stuff is. As regards the large squash bugs, Paris green or other poisons taken into the digestive organs have no effect on them. These insects do not eat with a mouth like larvae, but have a proboscis or snout with which they penetrate the outer skin of the leaf and suck the inner fleshy or juicy substance of the leaf. Therefore something must be applied to the body of the insect which is best done by using pyrethrum, with the little blower sold by druggists. That, while harmless to all lung breathing creatures, is a deadly poison to all insects of the beetle kind, breathing as they do through pores in the skin.—N. E. Farmer.

expect a good growth unless there is soil enough to furnish all the food the plant requires. If you clamp the roots, you must expect the plant to show it. So don't put a plant in a tea-cup and expect it to become a perfect fountain of verdure. It will grow well until it becomes root-bound, and the soil is exhausted, and then it will sicken and probably die. To have a vigorous plant, get a pot to contain it that has plenty of room for its roots to grow and spread in.

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It would require a volume to print all Lowell people have said in favor of Hood's Sarsaparilla. In Lowell, Mass., where Hood's Sarsaparilla is known as it has been for years, the leading medicine for purifying the blood, and toning and strengthening the system. This "good name at home" is "a tower of strength abroad."

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Poetry.

DOC SIFERS.

Of all the Doctors I could cite you to in this town
Doc Sifers is my favorite, jes' take him up and down;
Count in the Bethel neighborhood, and Rollins,
And Big Bear,

And Sifers' standin' jes' as good as any doctor's there.

There's old Doc Wick, and Glenn, and Hall, and Wurgler and McVeigh,

But I'll buck Sifers 'gainst 'em all, and down 'em any day;

Most old Wicks ever known, I s'pose, was whisky; Wurgler—well,

He or morphine—actions shows, and facts' reliable!

But Sifers—though he ain't no soot, he's got his faults; and yt

When you get Sifers once, you've got a doctor don't forget!

He ain't much in his office, er his house, er any where

You'd natrally think certain fer to ketch the feller there;

But don't blame Doc—he's got all sorts o' curious notions, as

The feller says—his, "odd-come shorts," like smart men mostly has:—

He'll morn like he potter 'round the blacksmith shop, er in

Some back lot paddin' up the ground, er gradin' it again:

Kr at the workbench, plauin' things, er building little traps

To catch birds; galvenizin' rings; er graftin' plums, perhaps;

Make anything, good as the best;—a gunstock, er a flute;

He whittled out a set o' chessmen onc't o' laurel root.

Durin' the army—got his trade o' surgeon therer—

I own

To-day a finger-ring Doc made out of a Seesel bone,

An' gived a fiddle onc't for me—jes' all so busted you

'D a-threw the thing away, but he jes' fixed her good as new.

And take Doc, now, in ager, say, er biles, er rheumatiz,

And all afflictions thataway, and he's the best they is.

Er janders—milk sick—I don't keev—kyore any thing he tries;

A abscess, gatherin' in yer yeer, er granulated eyes.

There was the Widdler Daubenspeck, they all give up for dead;

A blame combunble on her neck, and clean out of her head;

First had this doctor, what's his name, from "Puddlesburg," and then

This little red-head, "Burlin' shame," they called him, Dr. Glenn;

And they "consulted" and claimed she'd last to die;

Jes was joggin' by the place, and heard her doctery,

And stops and calls her to the feuce, and I, says I, Let me

Send Sifers—but you fifteen cents he'll k-yore her!"—Well," says she,

"Light out!" she says. And lipp-te-ent! I loped in town and rid

Bout two hours to find him, but I kussed him when I did;

He was down at the gunsmith-shop a stuffin' birdies. Says he,

"My sulk's broke." Says I, "You hop right on and ride me with me!"

I got him there. "Well, Aunty, ten days k-yores you," Sifers said—

"But what's yer livin' when yer jes' as good as dead?"

And then Dave Banks—jes' back from war, without a scratch, one day

Got ketched up in a sickle-bar—a reaper run away.

His shoulder, arms, and hands, and legs, jes' sawn in strips; and Jake Dunn stars for Sifers—Feller begs to shoot him for God-sake!

Doc, "course was gone, but he had penn'd the notice," At Big Bear,

Be back-to-morry: go to tend the Be Con-

vention there."

But Jake, he tracked him; rid and rode the whole endurn' night.

And 'bout the time the roosters crowed they both hove into sight.

Doc had to amputate, but 'greed to save Dave's arms, an' swore

He could a-save his legs if he'd be there the day before.

Like when his wife's own mother died, 'fore Sifers could be found.

And all the neighbors, fer and wide, a all jes' chasin' round;

Tell, finally—I had to laugh—it's jes' like Doc, you know

Was learnin' fer to telegraph, down at the old des-po!

* * * * *

But all they're faultin' Sifers fer, they's none o' em kin say

He's bigety, or keeless, er not posted, anyway;

He ain't built on the common plan of doctors nowadays.

He's jes' a great, big, brainy man—that's where the trouble lays.

Miscellaneous.

A GALA DRESS.

"I don't care anything about goin' to that Fourth of July picnic, 'Liz'beth."

"I wouldn't say anything more about it, if I was you, Em'y. I'd get ready and go."

"I don't really feel able to go, 'Liz'beth."

"I'd like to know why you ain't able."

"It seems to me as if the fire-crackers an' the tootin' on those horns would drive me crazy; an' Matilda Jennings says they're goin' to have a cannon down there, an' fire it off every half-hour. I don't feel as if I could stan' it. You know my nerves ain't very strong, 'Liz'beth."

Elizabeth Babcock uplifted her long, delicate nose with its transparent nostrils, and sniffed. Apparently her sister's perverseness had an acceptable odor to her. I wouldn't talk so if I was you, Em'y. Of course you're goin'. It's your turn to, an' you know it. I went to meetin' last Sabbath. You just put on that dress an' go."

Emily eyed her sister. She tried not to look pleased. "I know you went to meetin' last," said she, hesitatingly; but—Fourth of July picnic is a little more of a rarity." She fairly jumped, her sister confronted her with such sudden vigor.

"Rarity! Well, I hope a Fourth of July picnic ain't quite such a treat to me that I'd rather go to it than meetin'! I should think you'd be ashamed of yourself speakin' so, Em'y Babcock."

Emily, a moment before reluctantly alert and nervous like her sister, slunk limply in her limp black muslin. "I didn't think how it sounded, 'Liz'beth."

"Well, I should say you'd better think.

It don't sound very becomin' for a woman of your age an' profession' what you do. Now you'd better go and get out that dress, and rip the velvet off, an' sew the lace on. There won't be any too much time. They'll start early in the mornin'. I'll still up a cake for you to carry, when I get tea."

"Don't you s'pose I could get along with a cake?" Emily ventured, tremulously.

"Well, I shouldn't think you'd want to go, an' be beholden to other folks for your eatin'! I shouldn't!"

"I shouldn't want anything to eat."

"I guess if you go, you're goin' like the folks I ain't goin' to have Matilda Jennings peekin' an' pryn' an' tellin' things, if I know it. You'd better get out that dress."

"Well," said Emily, with a long sigh of reliefful satisfaction. She arose, showing a height that would have approached the majestic had it not been so wavering. The sisters were about the same height, but Elizabeth usually impressed people as being taller. She carried herself with so much decision that she seemed to keep every inch of her stature firm and taut, old woman though she was.

"Let me see that dress a minute," said she, when Emily returned. She wiped her spectacles, set them firmly, and began examining the hem of the dress, holding it close to her eyes. "You're gettin' it all tagged out," she declared, presently. "I thought you was. I thought I see some of ravelin's hangin' the other day when I had it on. It's jest because you don't stan' up straight. It ain't any longer for you than it is for me, if you didn't go all bent over so. Then ain't any need of it."

Emily oscillated wearily over her sister and the dress. "I ain't very strong in my back, an' you know I've got a weakness in my stomach that hinders me from standin' up straight as you do," she rejoined, rationally for a feeble defense.

"You can stan' up jest as well as I can, if you're a mind to."

"I'll rip that velvet off now, if you'll let me have the dress, 'Liz'beth."

Elizabeth passed over the dress, handling it gingerly. "Mind you don't cut it rippin' off it," said she.

Emily sat down, and the dress lay in shiny black billows over her lap. The dress was black silk, and had been in its day soft and heavy; even now there was considerable wear left in it. The waist and over-skirt were trimmed with black velvet ribbon. Emily ripped off the velvet; then she sewed on some old-fashioned, straight-edged black lace full of little embroidered sprigs. The sisters sat in their parlor at the right of the front door. The room was very warm, for there were two west windows, and a hot afternoon sun was beating upon them. Out in front of the house was a piazza, with a cool, uneven brick floor, and a thick lilac growth across the western end. The sisters might have sat there and been comfortable, but they would not.

"Well, I'd be much obliged to you if you would," returned Matilda. Her manner was a trifle overawed, but there was a sharper gleam in her eyes. Pretty soon she went home, and ate her solitary and substantial supper of bread and butter, cold potatoes, and pork and beans. Matilda Jennings was as poor as the Babcocks. She had never, like them, known better days. She had never possessed any fine old black muslins or black silks in her life, but she had always eaten more.

The Babcocks had always delicately and unobtrusively felt themselves above her. There had been in their lives a faint savor of gentility and aristocracy. Their father had been college-educated and a doctor. Matilda's antecedents had been humble, even in this humble community. She had come of wood-sawyers and garden-laborers.

In their youth, when they had gone to school and played together, they had always realized their height above Matilda, and even old age and poverty and a certain friendlessness could not do away with it.

The Babcocks owned the house and of which they lived. Nobody knew how much it was, nobody would ever know while they lived. They might have had more if they would have sold or mortgaged their house, but they would have died first. They starved daintily and patiently on their little income. They mended their old muslins and thimbles, and wore one dress between them for best, taking turns in going out.

It seemed inconsistent, but the sisters did not interfere with their pleasure in the simple village outings. They were more at ease abroad than at home, perhaps because there were not present so many doors through which to be opened into their secrecy. But they had an arbitrary conviction that their claims to respect and consideration would be forever forfeited should they appear on state occasions in anything but black silk.

They had over-skirts and little cupboards, and in them all superfluities were tucked away to protect them from dust and prying eyes. Never a door in the house stood open, every bureaux drawer was squarely shut. A whole family of skeletons might have been well hidden in these guarded recesses; but skeletons there were none, except, perhaps, a little innocent bone or two of old-womanly pride and sensitiveness.

The Babcock sisters guarded nothing more jealously than the privacy of their meals. The neighbors considered that there was a decided reason for this. "The Babcock girls have so little to eat that they're ashamed to let folks see it," people said.

It was certain that the old women regarded intrusion at their meals as an insult, but it is doubtful if they would not have done so had their table been set with all the luxuries of the season instead of scanty bread and butter and no sauce. No sauce for tea was regarded as very poor living by the village women.

To-night the Babcocks had tea very soon after the lace was sewed on the dress. They always had tea early. They were in the midst of it when the front door opened, and a voice was heard calling out in the hall.

The sisters cast a dismayed and indignant look at each other; they both arose; but the door flew open, and their little square tea-table, with its green and white chinaware, was taken off the minute its wearer entered her own house. It was shaken softly, folded, and laid away in a linen sheet.

Emily was dressed in it on the Fourth of July morning when Matilda Jennings called for her. Matilda came in her voluminous old alpaca, with her tin lunch-pail on her arm. She looked at Emily in the black silk, and her countenance changed. "My! you ain't goin' to wear that black silk trainin' round in the woods, are you?" said she.

"I guess she won't trall around much," spoke up Elizabeth. "She's got to go lookin' decent."

Matilda's poor old alpaca had many a threadbare streak and mended slit in its rusty folds, the elbows were patched, it was hardly respectable. But she gave the skirt a defiant swish, and jerked the patched elbows. "Well, I allers believe in goin' dressed suitable for the occasion," said she, sturdily, and as if that was her especial costume out of a large wardrobe. However, her bravado was not deeply seated, all day long she maneuvered to keep her patches and darns out of sight, she arranged the skirt nervously every time she changed her position, she held her elbows close to her sides, and she made many little flings at Emily's black silk.

"My!" cried the visitor, with a little backward shufflin'. "I do hope you'll excuse me! I didn't know you was eatin' supper."

"I don't really feel able to go, 'Liz'beth."

"I'd like to know why you ain't able."

"It seems to me as if the fire-crackers an' the tootin' on those horns would drive me crazy; an' Matilda Jennings says they're goin' to have a cannon down there, an' fire it off every half-hour. I don't feel as if I could stan' it. You know my nerves ain't very strong, 'Liz'beth."

Emily eyed her sister. She tried not to look pleased. "I know you went to meetin' last," said she, hesitatingly; but—Fourth of July picnic is a little more of a rarity."

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"Rarity! Well, I hope a Fourth of July picnic ain't quite such a treat to me that I'd rather go to it than meetin'! I should think you'd be ashamed of yourself speakin' so, Em'y Babcock."

Emily, a moment before reluctantly alert and nervous like her sister, slunk limply in her limp black muslin. "I didn't think how it sounded, 'Liz'beth."

"Come into the other room," said Elizabeth; and the visitor, still protesting, with her backward eyes upon the tea-table, gave way before her.

But her eyes lighted upon something in

the parlor more eagerly than they had upon that frugal and exclusive table. The sisters glanced at each other in dismay. The black silk dress lay over a chair. The caller, who was their neighbor, Matilda Jennings, edged toward it as she talked. "I thought I'd just run over an' see if you wasn't goin' to the picnic to-morrow," she was saying. Then she clutched the dress and diverged. "Oh, you've been fixin' your dress!" she said to Emily, with innocent insinuation. Insinuation did not sit well upon Matilda Jennings, none of her bodily lines were adapted to it, and the pretense was quite evident. She was short and stout, with a hard, sallow rotundity of cheek, her small black eyes were bright pointed under flesh brows.

"Well," replied Matilda, "I'd jest as soon. You'd better hold up your dress."

The two old women adjusted themselves stiffly upon their feet, and began ranging the grove, stepping warily over the slippery pine-nodes. The woods were full of merry calls; the green distances fluttered with light draperies. Every little while came the sharp bang of a fire-cracker, or the melancholy hoot of a fish-horn. Now and then blue gunpowder smoke curled up with the golden steam from the dewy ground. Emily was nearsighted; she moved on with innocently peering eyes, her long neck craned forward. Matilda had been taking the lead, but she suddenly stepped aside. Emily walked on unsuspectingly, holding up her precious black silk. There was a quick puff of smoke, a leap of flame, a volley of vicious little reports, and poor Emily Babcock danced as a martyr at her fiery trial might have done; her gentle dignity completely destroyed.

Matilda Jennings pushed forward; by that time Emily was standing, pale and quivering, on a little heap of ashes. "You stepped into a nest of fire-crackers," said Matilda: "a boy jest run; I saw him. What made you stan' there in 'em? Why didn't you run?"

(Continued from first page.)

Mr. Peter, and furnished with brick barn and stable of the most commodious character. All these, as well as the capacious woolen mills are built of brick made in Mr. Peter's own yard. Proceeding onward toward the factory we pass long lines of neatly built and painted dwellings, (each accompanied with its garden), for the accommodation of the operatives and their families. Passing these we come in full view of the factory, its long brick lines extending parallel to the river, while in rear and stretching along the river bank is a beautiful green lawn, half enveloped in fine shade trees; while high above all towers the massive smoke stack, pouring forth dense volumes of black smoke, almost sufficient to darken the sun. But now the din and clatter of looms, and the whirr of spindles meets the ear, and like the previous question in our legislative halls, puts an end to all debates. And now the next question is, how are we going to get there through the crowd of wagons, loaded with "raw material," and piling from all directions? And where do they all come from? and so early in the day? But at length we wedge in and begin to unload, during which process I avail myself of a few moments conversation with Mr. Jones, the foreman, who by is probably one of the most accomplished wool experts in the State.

"Well," he says, "we are getting in piles of wool. I think," continued he, "the greater part of it must be here, we have taken in over seventy thousand pounds." "I think" said I, "you will find yourself mistaken, because north of the river more than half the wool is still on the sheep's back, while at the south, where shearing is mostly done, they are holding back for higher prices."

Just then a line of five heavily loaded wagons filed in with the crowd, having at that early hour driven twenty-four miles from near Godrich, and containing the clips of some of the soldiest farmers of southeastern Gennese, and still they came, "onward, still onward," until ten thousand pounds were run up the elevators before noon, and over twenty thousand in all before night. And when the weary Mr. Jones turned in to rest on that Saturday night he congratulated himself that the next week would give him repose, as the wool must certainly be nearly all gathered in.

Monday (June 25th) came and with it thirty thousand pounds of wool. Tuesday brought thirty-five thousand pounds, and Wednesday thirty-two thousand. And now a freight train arrives, bringing from Oxford, in Oakland County, four car loads, which Mr. Peter's agent at that place had purchased. But these cars could not be unloaded until new storage is provided. The spacious space room of the factory is piled full. The agents who had been diligently traveling among the farmers and starting this wool storm, were told they could go home and await further orders. But of course this is not the end of Mr. Peter's wool buying. There was much contracted and yet to arrive, while the steady flow of casual arrivals from the country will still be provided for, and when the wool season closes it is fair to presume that it will close upon a stock of little if any short of a million pounds of home grown wool at the Columbiaville woolen mills.

Men seemed fairly well satisfied with prices, and a went away with full pockets and smiling faces, and I heard no one cursing the President.

It is a fact worthy of note that the famed clips of our noted Grand Blanc breeders, such as D. P. and H. R. Dewey and Gao. W. Stuart are here with the rest, piled, smothered, engulfed, swallowed up, in such a mass of "raw material" as can probably be found to-day in any factory in Michigan. Where, oh where, were Stone & Atwood of the Flint woolen mills? Where the enterprising business men of Flint and all the neighboring towns that they should suffer such things to be?

Cleveland's message can't scare such men as "Billy Peter." Pity there were not a dozen more like him, to build up a dozen other country towns as Mr. Peter has Columbiaville. There are plenty who are able, but they lack the "will power." I have in my mind's eye one of Michigan's worthy citizens who has probably spent money enough in canvassing for governors and for presidents, to build just such a woolen mill. Such an edifice would have been a proud monument, while it would have been protection reduced to practice.

buy wool, but knows there will be no change in the tariff.

Farmers, hold on to your wool.

The last sales in London, of the Australian clip, show an advance of a cent a pound.

The manufacturers are short of stock and short of manufactured goods.

Wool must be had, and they can't get American grade of wool in any country in the world for less than 35 cents per pound.

The low price does not come from tariff agitation.

That is an absurdity on its face.

Democrats would like to get the bill passed in the Senate, but know they can't.

So does everyone else know it.

They utter such silly nonsense as to assert that tariff agitation lowers the price.

It is a scheme of the Republican capital.

Farmers can knock it in the head. Put the wool into the granary, and hold it for 30 cents a pound and not a penny less.

The reasoning of the editor is a little wild, but he means well and undoubtedly did his best. He tells the farmers to hold on to their wool because the Mills bill cannot be passed and therefore wool will not decline. Then he says if the bill should pass prices would advance! He predicts wool will be worth 30 cents per lb. within three months.

We put the prediction on file and hope we will be able to verify its correctness. The editor says "manufacturers can buy wool of our grade, in any market," although he does not say what "our grade" is. We can find within ten miles of Adrian at least three or four different grades, every one of which can be purchased abroad cheaper than in this country, and only the度 prevents heavier purchases than at present. He will find the bulk of Lenawee County wools to be from Merino sheep, and for which merino wools from Australia and South America are substituted whenever they can be had at lower prices. Let the editor go to some wool grower and ask him if this is not so. The whole article is based on profound ignorance of what wools are grown in this country, and a desire to give advice on a matter of which the editor proves by his statements he knows nothing.

Pork Packing in the West.

The Cincinnati Price Current of Thursday says: "There has been considerable reduction in packing operations in the West the past week, the total number of hogs handled being 160,000, against 185,000 the preceding week, and 160,000 for corresponding time last year, making a total of 2,975,000 since March 1, compared with 2,985,000 a year ago. For the month of June the total packing was about 900,000 hogs, against 910,000 last year. During July last year the total packing was 600,000, or 76 per cent compared with June. It is not likely that this number will be exceeded this month, nor that there will be much shortage. In the provision trade values have almost steadily declined during the week, without wide changes from day to day, short rib sides closing relatively better than lard or pork."

Cheap Excursions to Duluth.

Arrangements have been made to run a series of cheap excursions to Duluth every ten days, on dates given below:

The iron passenger steamer "Wisconsin" will leave her dock at Port Huron (Fort Gratiot) at 10:30 A.M., July 30th, August 6th, August 20th and August 29th, for Duluth. She will leave her dock at Port Huron (Fort Gratiot) at 11 P.M., which is after the arrival of all trains from the East and West, and arriving at Duluth about noon of the third day, and remain at Duluth until the evening of the following day, arriving at Port Huron (Fort Gratiot) on the afternoon of the third day, occupying eight days from time of leaving Port Huron until her return.

Excursion tickets for any of the trips will be sold; the tickets good for the trip only.

The fare from Port Huron will be \$9 for the round trip, which includes meals and berth on steamer, in both directions, as well as at Duluth, if desired. Cheap excursion fares will be made to Port Huron from all agencies on the Chicago & Grand Trunk R.Y., Detroit, Grand Haven & Milwaukee R.Y., Michigan Air Line and Detroit Divisions of the Grand Trunk R.Y., and tickets will be sold through application.

The steamer "Wisconsin" is one of the most comfortable and best equipped passenger steamers on the lakes. She has comfortable accommodations for about one hundred passengers.

By making early application to the agents of the above companies, location in the state rooms will be secured free of expense.

Veterinary Department.

THE PRICE OF WOOL.

Under the above heading the editor of the Adrian Press publishes an article on the prospective price of wool which is so unique in its reasoning and displays such a profound knowledge of the question that we give our readers the benefit of it:

We hope our farmers will not be in a hurry to sell their wool.

Just now a Presidential election is pending and every Republican dealer and manufacturer is trying to crowd down the price of wool to influence Democratic farmers to vote.

The whole business is a political scheme. They all know that the Senate will never pass the Mills bill.

The Democrats do not expect to get it by the Senate.

But they are trying to get a start, and show the farmers of the country that they mean to revise the tariff if possible.

If the bill could pass both houses, the price of wool would go up at once.

This year, this spring, it is because of Republican scheming.

Hold on to your wool.

The tariff is the same as it has been for five years.

It can't be changed this year.

Manufacturers must have wool as heretofore.

It is no cheaper abroad than in the past.

Wool will bring 30 cents per pound in less than three months.

If Congress takes the tariff it will bring 30 cents per pound. Manufacturers can buy no wool of our grade, in any market, and if cheap carpet wools, and dear combing wools can be secured cheaper, by our manufacturers, then they can pay better prices for home wools.

But there's to be no change in tariff this year.

The wool buyers know it and the politicians know it.

All the above people abroad expecting to ship wool into this country and buying it on speculation abroad, because of the prospect of the passage of the Mills bill is bald-faced.

There isn't a man living, who believes the Senate would let the Democrats pass the bill.

There isn't a man who knows enough to

buy wool, but knows there will be no change in the tariff.

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Then he says if the bill should pass prices would advance!

He predicts wool will be worth 30 cents per lb. within three months.

We put the prediction on file and hope we will be able to verify its correctness.

The editor says "manufacturers can buy wool of our grade, in any market," although he does not say what "our grade" is.

We can find within ten miles of Adrian at least three or four different grades, every one of which can be purchased abroad cheaper than in this country, and only the度 prevents heavier purchases than at present.

He will find the bulk of Lenawee County wools to be from Merino sheep, and for which merino wools from Australia and South America are substituted whenever they can be had at lower prices.

Let the editor go to some wool grower and ask him if this is not so.

The whole article is based on profound ignorance of what wools are grown in this country, and a desire to give advice on a matter of which the editor proves by his statements he knows nothing.

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The editor says "manufacturers can buy wool of our grade, in any market," although he does not say what "our grade" is.

We can find within ten miles of Adrian at least three or four different grades, every one of which can be purchased abroad cheaper than in this country, and only the度 prevents heavier purchases than at present.

He will find the bulk of Lenawee County wools to be from Merino sheep, and for which merino wools from Australia and South America are substituted whenever they can be had at lower prices.

Let the editor go to some wool grower and ask him if this is not so.

The whole article is based on profound ignorance of what wools are grown in this country, and a desire to give advice on a matter of which the editor proves by his statements he knows nothing.

The reasoning of the editor is a little wild,

but he means well and undoubtedly did his best. He tells the farmers to hold on to their wool because the Mills bill cannot be passed and therefore wool will not decline.

Then he says if the bill should pass prices would advance!

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